

ABSTRACT OF THE DISCLOSURE

The present invention is directed to a novel phosphorescent compound formed by synthesizing an orthometallated complex by using easily-synthesized ligands. The invention is further directed to an electroluminescent device having high luminous efficiency by using the phosphorescent compound. Moreover, the invention is also directed to a light-emitting device operating at a low voltage by using the electroluminescent device. According to the present invention, a phosphorescent compound represented by general formula [formula 1] is synthesized. Further, an electroluminescent device containing the phosphorescent compound is formed. In order to generate phosphorescent emission more efficiently, a heavy metal is preferably used as a central metal from the perspective of heavy atom effects. Therefore, one feature of the present invention is that the central metal M in the below general formula [formula 1] is iridium or platinum.

